on the other hand, the costal processes are relatively of much smaller size, and are directed more horizontally outwards, so that their inner borders form nearly a right line with the anterior sternal border.

In both *Eudyptes* (Pl. VI. figs. 1, 2, 7) and *Spheniscus* (Pl. VI. fig. 8) the costal processes present an intermediate form. They are relatively of the same size as in *Aptenodytes*, but are directed less obliquely outwards than in *Pygoscelis*.

Apart from size, I could distinguish in the sternum no features characteristic of the species of the different genera, except in *Spheniscus demersus*, in which the costal processes are completely perforated by a foramen, which in other species is only represented by a depression on the lower surfaces of these processes.

The accompanying table shows the chief dimensions of the sternum of different species in inches.

Species.	Length of keel.	Greatest depth of keel.	Breadth of anterior border of sternum between first sternal ribs.	Shortest breadth between keel and lateral margin.	Depth of sternal notch from extremity of middle xiphoid process.
Eudyptes chrysocome, from Tristan, . .	4¾	1⅜	2½	1⅛	1⅝
Eudyptes chrysocome, from the Falklands, .	5	1⅜	2¾	1⅛	1½
Eudyptes chrysocome, from Kerguelen, . .	4¾	1¼	2½	1⅛	1⅝
Eudyptes chrysolophus, ...	6	1⅝	3	1¼	2
Spheniscus demersus, ...	5¼	1¾	3	1¼	1⅝
Spheniscus magellanicus, . . .	5¾	1¾	3¼	1¼	1¾
Spheniscus mendiculus, ...	4¼	1¼	2¼	⅞	1⅜
Spheniscus minor, ...	3⅜	1⅛	1¾	¾	1
Pygoscelis taeniatus, ...	6½	1¼	4½	1⅝	3
Aptenodytes longirostris, ...	8¼	2⅛	4½	1¾	3

APPENDICULAR SKELETON.

The Anterior Extremity.

The Scapula.

The scapula in every species of Penguin is, relatively to the other parts of the skeleton, of larger size than in any other group of birds, and is correlated with the